

CLAIMS

WHAT IS CLAIMED IS:

1 1. A method for controlling download access to content available via a
2 network service, comprising:
3 receiving a content download request from the network service,
4 wherein the content download request includes access information;
5 creating an access ticket object based on the access information,
6 wherein the access ticket object comprises a plurality of ticket fields to store a
7 plurality of access parameters parsed from the access information;
8 retrieving the access ticket object associated with a transaction
9 request using a ticket identifier accompanying the transaction request;
10 authorizing a content download based on the access parameters of
11 the retrieved access ticket object; and
12 delivering the content to a user terminal identified by the access ticket
13 object if the content download is authorized.

1 2. The method as in Claim 1, wherein creating an access ticket object
2 comprises creating the access ticket object at a download server coupled to the
3 network service via a network.

1 3. The method as in Claim 2, wherein retrieving the access ticket object
2 comprises fetching the access ticket object from a storage in the download server.

1 4. The method as in Claim 1, wherein the access parameters comprise
2 user-specific and access-specific parameters.

1 5. The method as in Claim 4, wherein the access-specific parameters
2 include content access rights identifying an access life cycle.

1 6. The method as in Claim 5, wherein the access life cycle transcends
2 user session boundaries.

1 7. The method as in Claim 4, wherein the user-specific parameters
2 include an identification of one or more users authorized to receive the content.

1 8. The method as in Claim 1, further comprising receiving a confirmation
2 message from the user terminal if the user terminal successfully receives the
3 delivered content.

1 9. The method as in Claim 8, further comprising modifying the access
2 ticket object to reflect changes in access rights resulting from the successful receipt
3 of the delivered content at the user terminal.

1 10. The method as in Claim 9, wherein modifying the ticket to reflect
2 changes in the access rights comprises decrementing a permitted download count.

1 11. The method as in Claim 9, wherein modifying the ticket to reflect
2 changes in the access rights comprises adjusting an access parameter identifying
3 when content may be downloaded.

1 12. The method as in Claim 9, wherein modifying the ticket to reflect
2 changes in the access rights comprises modifying at least one of a user identifier
3 and an equipment identifier to modify potential recipients of the content that may be
4 downloaded.

1 13. The method as in Claim 1, further comprising delivering an address of
2 the access ticket object to the requesting service upon creation of the access ticket
3 object.

1 14. The method as in Claim 1, further comprising storing the access ticket
2 object in persistent storage after creation of the access ticket object, and wherein

retrieving the access ticket object comprises retrieving the access ticket object from the persistent storage when the ticket identifier matches an access ticket object address.

15. The method as in Claim 1, further comprising calling a charging element to create a charging record upon delivery of the content to the user terminal.

16. The method as in Claim 1, wherein authorizing the content download comprises authorizing the content download to one or more of the user terminals associated with the ticket identifier of the access ticket object.

17. The method of Claim 1, wherein delivering the content to a user terminal comprises delivering the content via an XML document.

18. The method of Claim 1, further comprising fetching the content from a content storage facility upon authorizing the content download.

19. A download server for controlling access to downloadable content via a network, comprising:

- a storage module;
- a service handler configured to receive service requests to download content from a network service, to create and store in the storage module a ticket object having access parameters based on information provided in the service request, and to deliver to the network service a corresponding ticket address of the ticket object in the storage module; and
- a transaction handler configured to receive download transaction requests identifying the ticket address, to retrieve the ticket object from the storage module based on the ticket address and authorize a download transaction based on the access parameters of the ticket object, and to deliver the content to a user terminal identified by the ticket object upon authorization of the download transaction.

1 20. The download server as in Claim 19, wherein the transaction handler
2 is further configured to fetch the content corresponding to the transaction request
3 from a content storage facility.

1 21. The download server as in Claim 19, further comprising a charging
2 handler to call a charging facility to create a charging record upon delivery of the
3 content to the user terminal.

1 22. The download server as in Claim 19, wherein the storage module is a
2 non-volatile memory.

1 23. The download server as in Claim 19, wherein the access parameters
2 comprise an access quantity field to identify a number of times in which the
3 download transactions have been authorized.

1 24. The download server as in Claim 19, wherein the access parameters
2 comprise an access enable field to identify at what times the download transactions
3 have been authorized.

1 25. The download server as in Claim 19, wherein the access parameters
2 comprise an end-user identification field to identify the end-users to which the
3 content associated with the download transaction has been authorized.

1 26. The download server as in Claim 25, wherein the end-user
2 identification field comprises a user name.

1 27. The download server as in Claim 25, wherein the end-user
2 identification field comprises a user terminal identifier.

1 28. The download server as in Claim 27, wherein the user terminal
2 identifier is a Mobile Station ISDN/PSTN Number (MSISDN).

1 29. A system for controlling access to downloadable content via a network,
2 comprising:

- 3 (a) a user terminal to initiate content download requests;
4 (b) a network service module to receive the content download requests
5 and initiate service requests in response thereto;
6 (c) a download server coupled to the network service to receive the
7 service requests, the download server comprising:
8 (i) a storage module;
9 (ii) a service handler configured to create and store in the storage
10 module a ticket object having access parameters based on information
11 provided in the service request, and to deliver to the network service module
12 a corresponding ticket address of the ticket object in the storage module;
13 (iii) a transaction handler configured to receive download
14 transaction requests identifying the ticket address, to retrieve the ticket object
15 from the storage module based on the ticket address and authorize a
16 download transaction based on the access parameters of the ticket object,
17 and to deliver the content to a user terminal identified by the ticket object
18 upon authorization of the download transaction.

1 30. The system as in Claim 29, further comprising a content storage
2 facility to store the content corresponding to the download transactions.

1 31. The system as in Claim 29, wherein the download server further
2 comprises a charging handler to initiate a charging call upon delivery of the content
3 to the user terminal.

1 32. The system as in Claim 31, further comprising a charging facility to
2 create a charging record in response to the charging call from the charging handler.

1 33. A system for controlling download access to content available via a
2 network service, wherein the network service initiates a content download request
3 including access information, the system comprising:

means for creating an access ticket object based on the access information, wherein the access ticket object comprises a plurality of ticket fields to store a plurality of access parameters parsed from the access information;

means for retrieving the access ticket object associated with a transaction request using a ticket identifier accompanying the transaction request;

means for authorizing a content download based on the access parameters of the retrieved access ticket object; and

means for delivering the content to a user terminal identified by the access ticket object if the content download is authorized.

34. A computer-readable medium having computer-executable instructions for controlling access to downloadable content available via a network service, the computer-executable instructions performing steps comprising:

receiving a content download request from the network service, wherein the content download request includes access information;

creating an access ticket object based on the access information, wherein the access ticket object comprises a plurality of ticket fields to store a plurality of access parameters parsed from the access information;

retrieving the access ticket object associated with a transaction request using a ticket identifier accompanying the transaction request;

authorizing a content download based on the access parameters of the retrieved access ticket object; and

delivering the content to a user terminal identified by the access ticket object if the content download is authorized.

35. A method for controlling download access to a terminal to content available via a network service, comprising:

creating an access ticket based on user access information provided by the network service;

notifying the terminal of a ticket address corresponding to a stored location of the access ticket;

7 creating a transaction upon receipt of a transaction request including
8 the ticket address from the terminal; and
9 providing requested content to the terminal for each one or more
10 transaction requests identifying the transaction sent from the terminal.

1 36. The method of Claim 35, wherein creating the access ticket comprises:
2 receiving a content download request from the network service,
3 wherein the content download request includes the user access information;
4 parsing the content download request to obtain the user access
5 information; and
6 creating the access ticket based on the user access information.

1 37. The method of Claim 35, wherein notifying the terminal of a ticket
2 address comprises:
3 creating a document including the ticket address; and
4 sending the document to the network service for use by the terminal.

1 38. The method of Claim 35, wherein creating a transaction upon receipt
2 of a transaction request comprises:
3 fetching the access ticket corresponding to the ticket address provided
4 in the transaction request;
5 creating the transaction if the access ticket is valid; and
6 providing a transaction identifier corresponding to the created
7 transaction to the terminal.

1 39. The method of Claim 38, wherein providing requested content to the
2 terminal comprises providing the requested content to the terminal upon creation of
3 the transaction.

1 40. The method of Claim 39, wherein providing requested content to the
2 terminal further comprises providing the requested content to the terminal in
3 response to subsequent transaction requests including the transaction identifier.

1 41. A method for controlling download access to content available via a
2 network service, comprising:
3 receiving a content download request from the network service,
4 wherein the content download request includes access information;
5 creating a ticket based on the access information, wherein the ticket
6 comprises a plurality of ticket fields to store a plurality of access parameters parsed
7 from the access information;
8 storing the ticket;
9 providing a ticket address of the ticket to the service for use by a
10 terminal;
11 receiving a first transaction request including the ticket address from
12 the terminal;
13 retrieving the ticket corresponding to the ticket address;
14 creating a transaction based on the ticket, wherein the transaction is
15 associated with a transaction identifier;
16 retrieving targeted content identified in the first transaction request;
17 receiving subsequent transaction requests including the transaction
18 identifier from the terminal;
19 retrieving the transaction identified by the transaction identifier; and
20 retrieving targeted content identified in the subsequent transaction
21 requests.

1 42. The method as in Claim 41, further comprising providing the
2 transaction identifier to the terminal via a cookie.

1 43. The method as in Claim 41, further comprising providing the
2 transaction identifier to the terminal via URL encoding.